## AMENDMENTS TO THE CLAIMS

Please amend claims 7, 14, 19 and 20 and please cancel without prejudice or disclaimer claim 17. The following listing of claims will replace all prior versions, and listings, of the claims in the application.

1. (Previously presented) An isolated hMOR-1B1 splice variant polypeptide that consists essentially of the amino acid residues having the sequence of SEQ ID NO: 51.

2. (Previously presented) An isolated hMOR-1B2 splice variant polypeptide that consists essentially of the amino acid residues having the sequence of SEQ ID NO: 53.

3. (Previously presented) An isolated hMOR-1B3 splice variant polypeptide that consists essentially of the amino acid residues having the sequence of SEQ ID NO: 55.

4. (Previously presented) An isolated hMOR-1B4 splice variant polypeptide that consists essentially of the amino acid residues having the sequence of SEQ ID NO: 57.

5. (Previously presented) An isolated hMOR-1B5 splice variant polypeptide that consists essentially of the amino acid residues having the sequence of SEQ ID NO: 59.

6. (Previously presented) An isolated hMOR-1Y splice variant polypeptide that consists essentially of the amino acid residues having the sequence of SEQ ID NO: 61.

7. (Currently amended) A homodimer or heterodimer consisting of two polypeptides having sequences selected from the group consisting of SEQ ID NOs: 51, 53, 55, 57, 59, and 61~~, in which said polypeptide is a heterodimer or homodimer~~.

8. (Previously presented) An isolated polynucleotide consisting essentially of hMOR-1B1 having the sequence of SEQ ID NO: 50 or a polynucleotide that is fully complementary thereto.

9. (Previously presented) An isolated polynucleotide consisting essentially of hMOR-1B2 having the sequence of SEQ ID NO: 52 or a polynucleotide that is fully complementary thereto.

10. (Previously presented) An isolated polynucleotide consisting essentially of hMOR-1B3 having the sequence of SEQ ID NO: 54 or a polynucleotide that is fully complementary thereto.

11. (Previously presented) An isolated polynucleotide consisting essentially of hMOR-1B4 having the sequence of SEQ ID NO: 56 or a polynucleotide that is fully complementary thereto.

12. (Previously presented) An isolated polynucleotide consisting essentially of hMOR-1B5 having the sequence of SEQ ID NO: 58.

13. (Previously presented) An isolated polynucleotide consisting essentially of hMOR-1Y having the sequence of SEQ ID NO: 60 or a polynucleotide that is fully complementary thereto.

14. (Currently amended) A method of screening compositions for opioid activity comprising the steps of: a) contacting a cell comprising an MOR-1 splice variant polypeptide selected from the group consisting of SEQ ID NOs: 51, 53, 55, 57, 59, and 61 with a composition in an amount sufficient to exert a physiologic effect~~; b) separately contacting the cell with~~ and an opioid in an amount sufficient to exert a physiologic effect; ~~[[c)]]~~ b) measuring the physiologic effect of the composition and the opioid on the cell, relative to their effects on a control cell lacking the MOR-1 splice variant polypeptide, ~~[[;]]~~ where determination of a physiologic effect of the composition is expressed relative to the physiologic effect of the opioid.

15. (Original) The method according to claim 14, where the composition is selected from the group consisting of synthetic combinatorial libraries of small molecule ligands, eukaryotic whole cell lysates or extracts, or media conditioned by cultured eukaryotic cells.

16. (Original) The method according to claim 14, where the opioid is selected from the group consisting of morphine, methadone, etorphine, levorphanol, fentanyl, sufentanil, [D-Ala2,MePhe4,Gly(ol)5]enkephalin, pentazocine, ethylketocyclazocine, bremazocine, spiradoline, [D-Ser2,Leu5]enkephalin-Thr6, Met-enkephalin, Leu-enkephalin, (3-endorphin, dynorphin A, dynorphin B, or a-neoendorphin.

17. (Canceled)

18. (Currently amended) The method according to claim 14[[~~17~~]], where the hormone is selected from the group consisting of prolactin, growth hormone, gonadotropin-releasing hormone, adrenocorticotropin, corticotropin-releasing factor, luteinizing hormone, follicle stimulating hormone, testosterone or cortisol.

19. (Currently amended) A method of screening compositions for opioid binding activity comprising the steps of: a) contacting ~~a composition with~~ an MOR-1 splice variant polypeptide selected from the group consisting of SEQ ID NOs: 51, 53, 55, 57, 59, and 61, with a composition and an opioid; b) ~~contacting the MOR-1 splice variant polypeptide with an opioid c)~~ measuring binding of the composition and the opioid to said MOR-1 splice variant polypeptide; and [[~~d)~~]] c) comparing MOR-1 splice variant polypeptide binding of the composition to MOR-1 splice variant polypeptide binding to the opioid, where determination of binding of the composition is expressed relative to that of the opioid.

20. (Currently amended) The method according to claim 19[[~~21~~]], where the composition is selected from the group consisting of synthetic combinatorial libraries of small molecule ligands, eukaryotic whole cell lysates or extracts, or media conditioned by cultured eukaryotic cells.

21. (Withdrawn) A method for regulating morphine analgesia in a subject comprising altering the amount of MOR-1 splice variant activity by: a) administering antigen binding fragments to a subject in an amount and a duration sufficient to regulate morphine analgesia; or b) administering agonists to a subject in an amount and a duration sufficient to regulate morphine analgesia; or c) administering antagonists to a subject in an amount and a duration sufficient to regulate morphine analgesia; or d) administering small molecule ligands to a subject in an amount and a duration sufficient to regulate morphine analgesia; or e) administering an antisense nucleic acid corresponding to a nucleic acid encoding a polypeptide selected from the group consisting of SEQ ID NOs: 51, 53, 55, 57, 59, and 61 or a polypeptide fragment thereof or a polypeptide fragment thereof retaining MOR-1 opioid-binding activity, to a subject in an amount and a duration sufficient to regulate morphine analgesia; and wherein the antigen binding fragment, agonist, antagonist small molecule ligand or antisense nucleic acid is directed to an MOR-1 splice variant selected from the group consisting of SEQ ID NOs: 51, 53, 55, 57, 59, and 61.